

Chapter 1

Purpose and Need for Action



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CHAPTER 1 PURPOSE AND NEED FOR ACTION	1-1
1.1 Introduction and Background.....	1-1
1.1.1 Description of the White River Field Office Planning Area	1-1
1.2 Purpose and Need for the Resource Management Plan Amendment.....	1-3
1.2.1 Purpose of the Action.....	1-3
1.2.2 Need for the Action.....	1-3
1.3 Planning Process.....	1-4
1.3.1 Nine-Step Planning Process	1-4
1.3.2 Resource Management Plan Amendment Implementation	1-7
1.4 Scoping and Identification of Issues.....	1-8
1.4.1 Scoping Process	1-8
1.4.2 Issues Identified for Consideration	1-8
1.4.3 Issues Addressed Through Policy, Regulatory, or Administrative Actions	1-10
1.4.4 Issues that were Considered but Not Further Analyzed.....	1-11
1.4.5 Planning Criteria and Legislative Constraints.....	1-12
1.4.6 Relevant Statutes, Limitations, and Guidelines	1-13
1.4.7 Other Related Plans.....	1-14
1.4.8 Master Leasing Plans	1-15
1.5 Alternatives Considered but Not Carried Forward for Detailed Analysis.....	1-15
1.5.1 Current Management using 1997 Reasonable Foreseeable Development Scenario.....	1-15
1.5.2 Phased Development in the Piceance Basin.....	1-15
1.5.3 Single Well Pads	1-16
1.5.4 Reduced or Limited Pace of Oil and Gas Drilling	1-17
1.5.5 Limit on Number of Well Pads or Wells	1-17
1.5.6 Limiting Cumulative Total Surface Disturbance	1-17
1.5.7 Greater Sage-Grouse National Technical Team Report Alternative.....	1-18

List of Tables

Table 1-1	Surface and Subsurface Management Status in the WRFO Planning Area.....	1-2
Table 1-2	Plans Relevant to the WRFO Oil and Gas Development Draft RMPA/EIS.....	1-14

List of Figures

Figure 1-1	Nine Step Planning Process	1-5
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List of Maps

Map 1-1	White River Field Office Planning Area
Map 1-2	Oil and Gas Leased and Non-Leased Areas in the White River Field Office Planning Area
Map 1-3	Surface Geology and Major Tectonic/Physiographic Features
Map 1-4	Oil and Gas Potential, Mesaverde Play Area

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CHAPTER 1 PURPOSE AND NEED FOR ACTION

1.1 Introduction and Background

The Bureau of Land Management (BLM) White River Field Office (WRFO) has prepared this Draft Resource Management Plan Amendment and Environmental Impact Statement (RMPA/EIS) for Oil and Gas Development to evaluate and amend, if necessary, the current management decisions for oil and gas resources within the WRFO Planning Area. The current management decisions for oil and gas resources are described in the White River Record of Decision and Approved Resource Management Plan (approved July 1, 1997), as amended (referred to as the 1997 White River RMP) (BLM 1997a).

Resource Management Plans (RMPs) are land use plans that establish goals and objectives for resource management and guide land management actions, which are based on the principles of multiple use and sustained yield. Occasionally, decisions on how the land is managed need to be revised or amended to respond to new, intensified, or changed uses on public land, prompting an RMP revision or amendment. There has been a substantial increase in oil and gas activity (i.e., exploration and development) in the WRFO Planning Area (Map 1-1) in recent years, which is a trend that is expected to continue for the foreseeable future. Since 1997, the combination of new technology and demand for natural gas has stimulated interest by the energy industry in developing the extensive natural gas resources in the region, including the Piceance Basin. In addition, three new interstate pipelines and multiple regional pipelines have been completed or are in the process of being completed in the northern Piceance Basin, which would allow gas and gas products to be transported to markets in other regions. In response to these factors, the WRFO has proposed an amendment to the current RMP and an associated EIS which evaluates the effectiveness of management in achieving resource goals and objectives related to the projected increase in oil and gas development.

This RMPA/EIS was prepared using BLM's planning regulations (43 Code of Federal Regulations [CFR] Part 1600) and guidance issued under the authority of the Federal Land Policy and Management Act (FLPMA) of 1976. Section 102 of the FLPMA sets forth the policy for periodically projecting the present and future use of public lands and their resources through the use of a planning process. Sections 201 and 202 of the FLPMA are the statutory authorities for land use plans prepared by the BLM. The associated EIS is included in this document to meet the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), Department of the Interior (DOI) Implementation of the National Environmental Policy Act of 1969 Final Rule (43 CFR Part 46), and the requirements of BLM's NEPA Handbook 1790-1 (BLM 2008a) and Land Use Planning Handbook H-1601-1 (BLM 2005a).

1.1.1 Description of the White River Field Office Planning Area

The WRFO Planning Area for the RMPA/EIS includes all lands, regardless of surface management or ownership, within the WRFO boundary shown in Map 1-1. The WRFO Planning Area includes approximately 2.7 million acres of BLM, National Park Service (NPS), U.S. Forest Service (FS), state, and private lands located in northwestern Colorado, primarily in Rio Blanco County, with additional tracts located in Garfield and Moffat counties. The WRFO administrative office is located in the town of Meeker in northwestern Colorado.

Chapter 1 – Purpose and Need for Action

Within the WRFO Planning Area, the BLM administers approximately 1.5 million surface acres and 2.2 million acres of federal oil and gas minerals (subsurface) estate. Management decisions made as a result of this RMPA/EIS process would apply only to BLM-administered lands in the WRFO Planning Area (Map 1-1). Table 1-1 presents a summary of land ownership status (including split estate) as well as BLM surface and subsurface land ownership within the WRFO Planning Area.

Approximately 73 percent of federal lands available for oil and gas leasing within the WRFO Planning Area have been leased, including 92 percent of the leasable acres within the Mesaverde Play Area (MPA) (Map 1-2). Decisions adopted at the conclusion of the RMPA/EIS process, would apply to new leasing decisions. Lease stipulations on existing oil and gas leases disclosed in the 1997 White River RMP would continue to apply to these leases. New or additional surface protective measures equivalent to the lease stipulations identified in this RMPA/EIS process may be applied as Conditions of Approval (COAs) to existing leases at the time of Application for Permit to Drill (APD) approval. Map 1-2 displays leased and non-leased areas in the WRFO Planning Area.

Table 1-1. Surface and Subsurface Management Status in the WRFO Planning Area

Surface Manager/Owner	Rio Blanco County (acres)	Moffat County (acres)	Garfield County (acres)	Total Acres
Surface				
Federal: BLM	1,151,100	232,700	74,300 ⁽¹⁾	1,458,100 ⁽²⁾ [1997 White River RMP: 1,455,900]
Federal: NPS – Dinosaur National Monument	0	71,500	0	71,500
Federal: FS – White River National Forest	246,900	0	129,200	376,100
State: Colorado Parks and Wildlife, Colorado State Parks, Colorado State Land Board	44,400	19,800	300	64,500
County	200	0	0	200
Private	480,500	99,800	124,900	705,200
TOTAL	1,923,100	423,700	328,700	2,675,600
Subsurface – Federal Oil and Gas Mineral Estate				
Federal surface/Federal oil and gas minerals	1,398,100	303,800	203,500	1,905,400
State surface/Federal oil and gas minerals	16,700	0	0	16,700
County surface/Federal oil and gas minerals	200	0	0	200
Private surface/Federal oil and gas minerals	195,400	48,400	60,000	303,800 ⁽²⁾ [1997 White River RMP: 349,300]
TOTAL	1,610,400	352,200	263,500	2,226,100

SOURCE: BLM 2006a; BLM 2008b.

NOTES:

Sums may not equal totals due to rounding of individual cells. Acreages have been rounded to the nearest 100 acres.

⁽¹⁾ The total acreage in Garfield County managed by the BLM includes 4,010 acres formerly managed by the Department of Energy (Naval Oil Shale Reserve).

⁽²⁾ Current total adjusted for sales and exchanges.

1.2 Purpose and Need for the Resource Management Plan Amendment

The FLPMA of 1976 requires that the BLM “develop, maintain, and when appropriate, revise land use plans...” (43 United States Code [USC]§1712). The BLM has proposed to amend the 1997 White River RMP be prepared to evaluate changing conditions in the WRFO Planning Area that have raised new issues and concerns since approval of the 1997 White River RMP. The CEQ regulations (40 CFR 1502.13) require an EIS to “briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.” This chapter provides the context and framework for establishing and evaluating a reasonable range of alternatives, which are described in Chapter 2 of this document.

1.2.1 Purpose of the Action

The purpose of this Amendment to the 1997 White River RMP is to provide effective management direction for public lands administered by the WRFO, and direction that permits oil and gas exploration and development in excess of levels evaluated in the 1997 White River RMP. The BLM management decisions at the WRFO will continue to be based upon the approved 1997 White River RMP until such time that decisions are amended through RMP amendments and/or revisions. During the development of the Draft RMPA/EIS, the BLM reviewed the decisions contained in the 1997 White River RMP. Many elements of the 1997 White River RMP are adequate and remain valid; there will be no changes to those management decisions. Only those management decisions specifically identified in the Record of Decision will supersede existing management decisions in the 1997 White River RMP.

The BLM must establish guidance, objectives, policies, and management actions for lands and resources under the jurisdiction of the WRFO, in accordance with valid existing rights, obligations, and to guide decision making for future site-specific actions. Decisions may be evaluated and revised as necessary to reflect changing conditions; however, any major changes in management would require additional NEPA analysis, as described in Section 1.3.2.

1.2.2 Need for the Action

The BLM has determined that the level of oil and gas activities evaluated in the 1997 White River RMP has increased substantially. The BLM has determined it needs to update the 1997 White River RMP to reflect a greater Reasonable Foreseeable Development (RFD) Scenario developed in 2007, and an increase in APDs since 2001. This would include establishing appropriate goals, objectives, management actions, priorities, and procedures to manage the projected increase in oil and gas activity in relation to other resources within the WRFO Planning Area and to address the potential environmental and socioeconomic impacts of the predicted oil and gas development.

The Energy Policy and Conservation Act (EPCA) Reauthorization of 2000 directed the DOI to produce a scientific inventory of oil and gas resources and reserves underlying federal lands. The resulting EPCA inventory identified the Uinta-Piceance Basin (Colorado and Utah) as one of five sub-basins in the continental United States with large resources of undeveloped oil and gas energy potential. In addition to the EPCA inventory, oil and gas prices changes, development of interstate transportation pipelines, and improved drilling technology have also influenced increases in exploration, development, and production of oil and gas resources in the WRFO Planning Area.

The 1997 White River RMP projected and analyzed an RFD Scenario of 1,100 potential oil and gas wells that would encompass 10 acres of disturbance per well (including roads and pipelines)

developed at a rate of approximately 55 single well pads per year, totaling 1,100 single well pads for a 20-year period (1997 through 2017). Disturbance was estimated to be approximately 11,000 acres over a 20-year period. The 1997 RFD Scenario also projected that nearly two-thirds of the oil and gas development activity would take place in the Douglas Creek Arch south of Rangely, Colorado, with the remaining activity dispersed throughout the rest of the WRFO Planning Area. While this projection has been fairly accurate for the activity south of Rangely, there has been a substantial increase in natural gas exploration and development in the MPA, located generally within the Piceance Creek Basin in the central portion of the WRFO Planning Area (Map 1-3 and Map 1-4) (BLM 1996).

An updated RFD Scenario was prepared in 2007 as a result of the changing conditions in oil and gas development to present a 20-year forecast of drilling activity on federal, state, and private lands within WRFO boundaries (BLM 2007). The 2007 RFD Scenario for potential oil and gas development activities in the WRFO Planning Area projected the potential need for the construction of between 550 and 2,556 multiple well pads, averaging eight drilled wells per pad, over a 20-year period (2009 through 2028), with the majority of development occurring in the Piceance Creek Basin of the WRFO Planning Area. Disturbance is estimated to range from 6,725 to 31,257 acres with an average of approximately 12 acres of total disturbance per well pad (including roads and pipelines) (BLM 2007). The 2007 RFD Scenario predicts an increase in oil and gas activities above the level evaluated in the 1997 White River RMP.

The 2007 RFD Scenario emphasizes the changing conditions in the WRFO Planning Area and the BLM has identified the need to manage the potential impacts of the projected increase in oil and gas activity in relation to other resources within the WRFO Planning Area and the BLM's mission of multiple use and sustained yield. Therefore, the BLM has determined that it will amend the 1997 White River RMP.

1.3 Planning Process

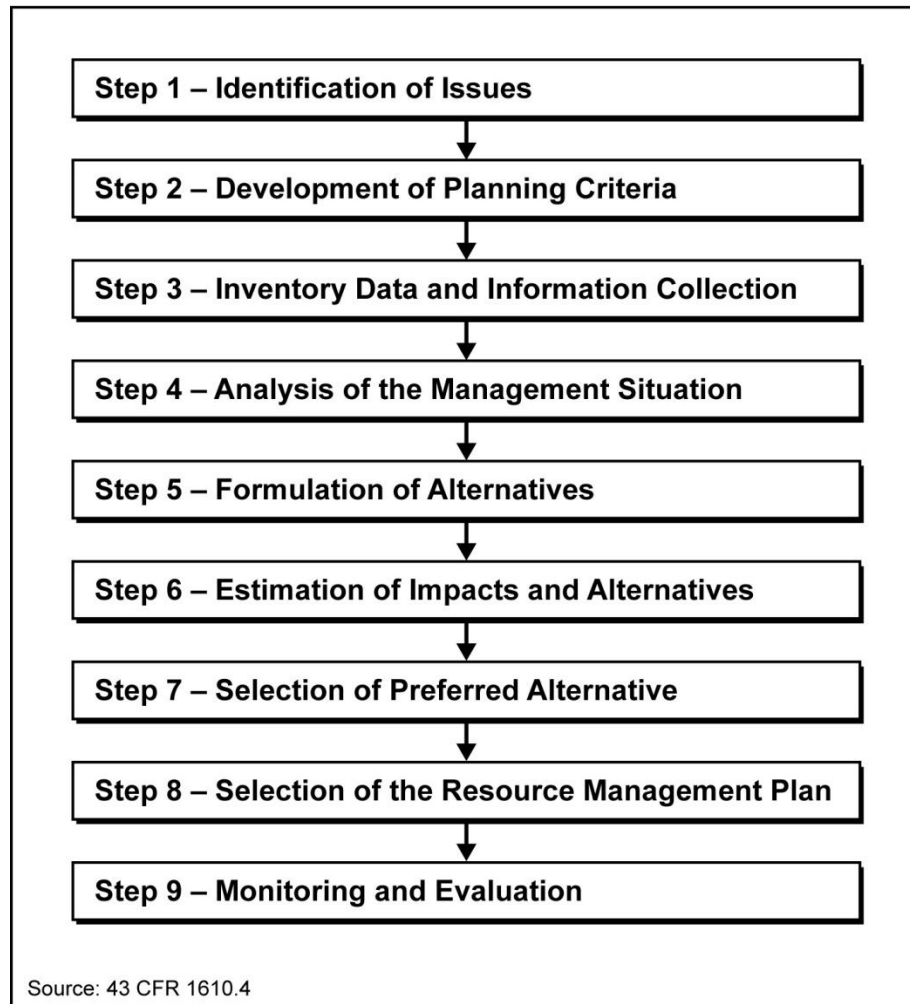
The NEPA requires federal agencies to prepare an EIS for a major federal action significantly affecting the quality of the human environment. The environmental analysis of alternatives and the proposed RMPA are as part of the resource management planning process to develop the proposed RMPA and related EIS which are published as a single document called the WRFO Oil and Gas Development Draft RMPA/EIS. This EIS analyzes the impacts of four alternatives, including the No Action Alternative (current management). The CEQ regulations direct that an EIS explore and objectively evaluate a range of reasonable alternatives, including the Proposed Action and a No Action Alternative, and describe any alternatives considered, but eliminated from detailed analysis with the rationale for elimination (40 CFR 1502.14 (a)). Each action alternative represents different management decisions that fulfill the purpose and need, address unresolved conflicts related to the proposed action, and include relevant mitigation measures to avoid or minimize impacts associated with oil and gas development.

1.3.1 Nine-Step Planning Process

When developing or amending an RMP, the BLM uses a nine-step planning process (Figure 1-1) identified in 43 CFR 1600 and the BLM Land Use Planning Handbook (BLM 2005a). Here, the BLM is amending the 1997 White River RMP to address current and projected oil and gas activity in the WRFO Planning Area. The steps in the nine-step planning process are the same for developing a plan amendment as they are for developing an RMP. The BLM manages federal land under principles of multiple use and sustained yield, consistent with laws, regulations, and policies

governing the administration of public land, in consultation and coordination with other federal agencies, Native American tribes, state and local governments, and the views of the general public.

Figure 1-1. Nine Step Planning Process



The following is a brief description of each step in the nine-step planning process:

As depicted in Figure 1-1, the planning process is issue-driven (**Step 1**). The BLM used the public scoping process (a collaborative public involvement process) to identify issues to be addressed in the planning process relevant to projected increases of oil and gas activity to direct the amendment of the 1997 White River RMP (Scoping Report [BLM 2007a]). Issues are described in more detail in Section 1.4. The public scoping process was also used to introduce the public to the preliminary planning criteria, which defined the scope of the Draft RMPA/EIS (**Step 2**).

As appropriate, the BLM collected data to address planning issues and to fill data gaps identified during public scoping (**Step 3**). Using these data, planning issues, and planning criteria, the BLM conducted **Step 4**, Analysis of the Management Situation (AMS), to describe current management (i.e., No Action Alternative) and identify management opportunities for addressing the planning

issues (Analysis of the Management Situation [BLM 2007b]). Management opportunities identified in the AMS were used to help formulate alternatives.

The results of the first four steps of the nine-step planning process clarified the Purpose and Need and identified issues that would need to be addressed in this Draft RMPA/EIS.

During alternatives formulation (**Step 5**), the BLM collaborated with cooperating agencies, federal agency partners, and a subgroup of the Northwest Resource Advisory Council (NWRAC). The NWRAC is one of three Resource Advisory Councils (RAC) in Colorado appointed by the Secretary of the Interior to represent constituent public land users on public land management issues and to gain their input on draft alternative themes, and management goals and objectives (desired outcomes) identified by the BLM for resources and resource uses in the WRFO Planning Area. The desired outcomes:

- Were developed to address the identified planning issues;
- Were guided by the planning criteria (identified in Step 2); and
- Incorporated BLM's management concerns and opportunities that were identified in the AMS (BLM 2007b).

Based on input received from cooperating agencies and federal agency partners on the draft alternative themes and desired outcomes, the BLM developed the preliminary draft alternatives. These alternatives include a broad range of management actions and allowable uses that are anticipated to achieve the goals and objectives. The alternatives represent a reasonable range of options for managing resources and resource uses within the WRFO Planning Area. Chapter 2 of this document further describes and summarizes the alternatives screening process and the No Action and action alternatives carried forward throughout the NEPA process. Tables 2-1 through 2-21 present a comparison of the alternatives and associated management actions.

The Draft RMPA/EIS includes an analysis of the direct, indirect, and cumulative impacts of each alternative in Chapter 4 (**Step 6**). With input from cooperating agencies, federal agency partners, the NWRAC, and the BLM resource specialists, and in consideration of planning issues, planning criteria, and the impacts of alternatives, the BLM has the discretion to select an alternative in its entirety (Alternatives A, B, C, or D) or to combine aspects of the various alternatives presented in this Draft RMPA/EIS (**Step 7**). The BLM has identified and recommends that, Alternative C is the Preferred Alternative.

Step 8 of the land use planning process (Selection of the RMPA), would occur following receipt and consideration of public comments on the Draft RMPA/EIS. Agencies and the public would have the opportunity to comment during a 90-day period that starts after the Notice of Availability (NOA) is published in the Federal Register. The BLM Deciding Official would evaluate the comments received and select and recommend to the State Director, for supervisory review and publication, a Proposed RMPA and Final EIS. After supervisory review of the Proposed RMPA, the State Director shall publish the plan and file the related EIS with the Environmental Protection Agency (EPA) according to the EPA's filing guidelines. (76 Fed. Reg. 2681 [January 14, 2011]). During **Step 9**, Monitoring and Evaluation, the BLM would implement the Approved RMPA, and using established intervals and standards, as appropriate, would monitor and evaluate how well the plan is guiding the WRFO towards the desired resource conditions within the WRFO Planning Area. Most plan amendment decisions and various plans contained within the plan amendment NEPA analysis (e.g., Monitoring Plan, Reclamation Plan) are effective upon signing of the decision document (i.e., Record of Decision). Implementation decisions are put into effect by developing an

Implementation Plan that provides the details for on-the-ground action, describes the process for implementation of the planning decisions, and evaluates the effectiveness of those decisions.

1.3.2 Resource Management Plan Amendment Implementation

Planning and decision-making for the management of BLM-administered lands is a tiered, ongoing process. Documents produced during each successive tier are progressively more detailed in terms of their identification of specific measures to be undertaken and potential impacts. Tiering narrows the scope of the subsequent analysis, and focuses on issues that are important for decision-making. The subsequent plans could require additional public review and environmental compliance documentation. Planning documents include the 1997 White River RMP, which provides an overall vision of the future (goals and objectives) and includes measurable steps, anticipated management actions, and allowable uses to achieve that vision. The 1997 White River RMP has been amended through the implementation of several Amendment documents (as listed below) which provide current management direction and include additional management actions and allowable uses:

- Oil Shale Withdrawal Revocation/RMP Amendment (CO-GJFO-01-81-EA), 2001
- Wilson Creek Transportation Plan Amendment to the White River RMP (CO-110-2004-032-EA), 2004
- West Douglas Herd Area Amendment to the White River RMP (CO-WRFO-05-083-EA), 2007
- Record of Decision for Approval of Portions of the Roan Plateau RMP Amendment and EIS, 2007¹
- Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States, 2008
- Record of Decision for the Designation of Areas of Critical Environmental Concern for the Roan Plateau Resource Management Plan Amendment and Environmental Impact Statement, 2008¹
- Approved Resource Management Plan Amendments/Record of Decision for Oil Shale and Tar Sands Resources to Address Land Use Allocations in Colorado, Utah, and Wyoming and Final Programmatic EIS, 2008
- Approved Resource Management Plan Amendments/Record of Decision for Designation of Energy Corridors on Bureau of Land Management-Administered Lands in the 11 Western States, 2009 (commonly referred to as the West-wide Energy Corridor (WVEC) EIS)

The proposed RMPA, tiers to the 1997 White River RMP to provide guidance and actions for oil and gas management decisions. Upon approval of the RMPA, subsequent implementation decisions would be carried out by developing activity-level or project-level plans that reflect the RMPA's management direction. Planning analysis would be conducted, which involves a process of using appropriate environmental resource data and NEPA analysis to provide a basis for decisions in areas not yet covered by the 1997 White River RMP or RMPA/EIS.

The BLM will develop an implementation plan for this RMPA/EIS and meet annually to coordinate with cooperating agencies, and federal, state, local and tribal partners. The annual coordination meeting would include an update on implementation of the RMPA, foreseeable activities for the

¹ The Oil and Gas Development RMPA/EIS will not amend or change the decisions made within the Roan Plateau RMP Amendment.

upcoming year, and opportunities for continued cooperation. Additional coordination meetings may be held, as needed.

1.4 Scoping and Identification of Issues

1.4.1 Scoping Process

The BLM conducted an early and open public scoping process to identify issues associated with resource demand and multiple use management for consideration in this Draft RMPA/EIS. The process began with the publication of the Notice of Intent in the Federal Register on June 14, 2006 (Vol. 71, No. 114, Page 34388). As part of the scoping process, the BLM solicited comments and concerns from the public, non-government organizations, tribal governments, and federal, state, and local agencies, as well as from BLM specialists (Final Scoping Report [BLM 2007a]). The BLM's Land Use Planning Handbook defines planning issues as "...disputes or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices" (BLM 2005a). The BLM's planning regulations (43 CFR Part 1610.4-1) state that "the identification of issues shall also comply with the scoping process required by the CEQ regulations." NEPA regulations require the BLM to review the issues and determine which are significant, and to narrow the discussion of issues in the EIS prepared for the RMPA. Issues identified from comments obtained during the scoping for this Draft RMPA/EIS were organized into the following categories:

- Issues within the scope of the EIS and used to develop alternatives or otherwise addressed in the EIS through the NEPA process.
- Issues outside the scope of the EIS or that could require policy, regulatory, or administrative actions.

Important issues to be addressed in the RMPA/EIS were identified by the public and the agencies during the scoping process. For a detailed description of the scoping process and the issues identified during scoping, please refer to the Final Scoping Report (BLM 2007a). The Final Scoping Report is available for review on the WRFO planning web page at:
http://www.blm.gov/co/st/en/BLM_Programs/land_use_planning/rmp/white_river/documents.html.

During scoping, the public and agencies expressed concerns about the scope of the decision to be made through the NEPA process. The public wanted to ensure that the NEPA planning process is open and clearly understood. Questions were raised about the nature and the extent of the planned oil and gas exploration and development. The purpose of this document is to describe the environmental consequences and the decisions regarding oil and gas development to be made by the BLM.

In addition to the issues identified during scoping, other resource and use issues are identified in the BLM Land Use Planning Handbook (BLM 2005a). All of these issues were considered in developing the alternatives brought forward in this RMPA/EIS.

1.4.2 Issues Identified for Consideration

In its Final Scoping Report (BLM 2007a), the BLM grouped the issues identified during scoping into six broad topics. The issues within each topic the BLM identified as being within the scope of the RMPA/EIS are summarized below.

Topic 1: Natural Resources

- Air Quality
 - Would an effective air quality monitoring program be established?
 - Would nearby Clean Air Act Class I Wilderness Areas and National Parks be affected?
 - What are the cumulative effects to air quality of the proposed oil and gas development?
- Water Quality
 - How would produced water be handled and disposed?
 - Would sufficient fresh water be available for oil and gas production?
 - Could subsurface releases of gases and drilling fluids result in migration of these materials along fault lines to groundwater or surface waters?
 - Would fracturing fluids result in a decline in water quality?
 - How would oil and gas development be managed to reduce impacts to wetlands, surface water, and groundwater?
- Vegetation
 - How should vegetation, noxious weeds, and riparian areas be managed to achieve healthy forests and rangelands while providing for livestock grazing and habitat for fish and wildlife?
- Fish, Wildlife, and Special Status Species
 - How would impacts to greater sage-grouse, Colorado River cutthroat trout, and other special status species be managed?
 - Would fragmentation of wildlife and habitat be avoided, and would fawning/calving habitat corridors be protected?
 - Would the BLM restrict activities in certain areas during certain times of year to avoid negative impacts to breeding or nesting birds or wintering populations of big game?
- Would the wild horse population be protected from adverse effects of oil and gas development?
- How should development be managed to maintain, enhance, or protect wilderness characteristics?

Topic 2: Heritage Resources Management

- How would cultural resources, archaeological sites, and historical sites be protected and conserved?

Topic 3: Management of Human Activities and Uses

- Recreation Management
 - How would oil and gas development impact hunting, primitive recreation such as hiking, camping, and wildlife viewing, and other out-of-state visitor experiences?
 - Would areas open to drilling still be open to public recreational use?
 - Would the BLM designate Special Recreation Management Areas (SRMAs)?

- Rangeland Management
 - How would oil and gas development impact vegetation and grazing for livestock and wildlife?
- Land and Realty, Utility Corridors, Rights-of-Way (ROWs), and Withdrawals
 - Would stipulations be applied to individual sites rather than as a mandatory condition of all leases?

Topic 4: Transportation and Access Management

- How would oil and gas development impact traffic in the area?
- Would new and existing roads and trails be maintained or improved?
- Would new oil and gas access roads be open to use by off-road vehicles?
- What best management practices (BMPs) would be implemented to avoid and/or minimize impacts to sensitive (e.g., streams and riparian areas) resources?
- What steps would be taken to evaluate proposed construction or improvement of roads for impacts to the transportation network and to the environment?

Topic 5: Management for Aesthetic and Social Values

- Social and Economic Values
 - What methods or models would the BLM use to evaluate the social and economic benefits and costs of the proposed oil and gas development?
- Visual Resource Management
 - Would the existing character of the landscape be preserved, including unique backcountry landscapes?
 - How would the BLM address light pollution, regional haze, and the degradation of viewsheds, including the viewshed from Dinosaur National Monument?

Topic 6: Integration of Management with other Agency Plans

- Would coordination and consistency with county land use plans, emergency services, state resource management plans, and other Federal Plans and Guidance be considered?

1.4.3 Issues Addressed Through Policy, Regulatory, or Administrative Actions

Policy or administrative actions include those actions that are implemented by the BLM because they are standard operating procedure, because federal law requires them, or because they are BLM policy. They are issues that are eliminated from detailed analysis in this planning effort.

Administrative actions do not require a planning decision to implement because they are a requirement of federal law or BLM policy. The following issues raised during scoping are already addressed by administrative actions:

- Compliance with existing laws and policies (e.g., FLPMA, NEPA, Endangered Species Act, American Antiquities Act, Clean Air Act, Clean Water Act, Colorado River Basin Salinity Control Act, and the National Historic Preservation Act).

- Application of the Colorado Standards for Public Land Health and Guidelines for Livestock Grazing Management addresses, among other issues, the allocation of forage for grazing animals and wildlife, the numbers of livestock, and changes in grazing management practices.
- Education and coordination for volunteers and citizens to better understand fragile resources.
- Consistency of decision-making with existing federal, tribal, state, and local plans and policies, recognizing that decisions must be made in conformance with relevant laws, regulations, and BLM management policies.
- Management and protection of cultural resources, which includes up-to-date inventories, non-disclosure of sensitive sites, nomination and listing of cultural sites for the National Register of Historic Places, and Native American consultation.
- Management of the WRFO's six existing Wilderness Study Areas (WSAs) (approximately 82,800 acres) under the Interim Management Policy (IMP) for Lands Under Wilderness Review (BLM Manual H-8550-1; BLM 1995). These WSAs are statutorily required (pursuant to FLPMA Section 603(c)) to be managed to protect their suitability for Congressional designation into the National Wilderness Preservation System (NWPS).
- Completion of inventory of riparian and wetland areas and the use of monitoring and mitigation to help protect these resources.
- Continuing work on a comprehensive sign system and maps for recreational and other users.
- Administration of existing mineral leases, permits, and other authorized uses.
- Use of valid existing rights.
- Monitoring wildlife and biodiversity.
- Monitoring air quality.
- Eligibility standards for specially designated areas.
- Protection of threatened, endangered, or sensitive species, including formal consultation with the U.S. Fish and Wildlife Service on Graham's beardtongue, Dudley Bluffs bladderpod, and Dudley Bluffs twinpod.
- Implementation of a comprehensive travel management plan, including consideration of off-road vehicle use, a detailed closure and restoration schedule, and a monitoring system for road and trail maintenance and development.
- Coordination with local, state, and federal agencies, and tribal governments.
- Cooperation with user groups, interested stakeholders, and the public.

1.4.4 Issues that were Considered but Not Further Analyzed

Consistent with the purpose of this action, issues addressed in this RMPA/EIS are those that deal specifically with an increase in oil and gas exploration, development and production, and the potential effects of that increase on other resource uses and values within the WRFO Planning Area. Resource outcomes and management actions were evaluated for all resources in the context of an increase in oil and gas development. Other topics that could be relevant to other planning issues within the WRFO Planning Area are not addressed in this RMPA/EIS. Examples of issues or topics not addressed in this RMPA/EIS include, but are not limited to:

- Activities and uses beyond the jurisdiction of the BLM.
- Changing existing laws, policies, and regulations.
- Revisions to decisions on the acreage of lands available for oil and gas leasing.
- Designation of new Wilderness or Wilderness Study Area (WSA) designations.
- Designation of new Areas of Critical Environmental Concern (ACECs) or other special designations.
- Change or elimination of grazing allotments.
- Revision to allowable uses or management actions for resources not related to oil and gas activities (e.g., travel management decisions to designate roads and trails only).
- Inclusion of land tenure adjustments.
- Considering alternative energy sources (wind and solar energy) as substitutes for activities related to mineral development.
- Lands owned by the State of Colorado and managed by the State Board of Land Commissioners are not covered by this plan.

1.4.5 Planning Criteria and Legislative Constraints

Public scoping involved the introduction of preliminary planning criteria to the public for comment. The BLM Land Use Planning Handbook defines planning criteria as guiding development of the planning document by "...helping define the decision space (or the "sideboards" that define the scope of the planning effort); they are generally based upon applicable laws, Director and State Director guidance, and the results of public and governmental participation (43 CFR 1610.4-2)." Planning criteria influence all aspects of the planning process, including inventory and data collection, developing planning issues to be addressed, formulating alternatives, estimating impacts, and selecting the Preferred Alternative. In conjunction with the planning issues, planning criteria ensure that the planning process is focused and incorporates appropriate analyses. The criteria also help to guide the selection of the Preferred Alternative and implementation of the plan and are used as a basis for evaluating the responsiveness of the planning options.

Planning criteria used in this RMPA/EIS are:

- The plan will be in compliance with the FLPMA (43 USC§1701 et seq.), as it pertains to BLM lands. Actions comply with all relevant laws, regulations, executive orders, and BLM policies and guidance.
- The plan will establish the guidance upon which the WRFO will rely on to manage the lands and resources under its jurisdiction.
- The planning process will incorporate analyses documented in this RMPA/EIS in accordance with NEPA.
- Actions must be reasonable and achievable and allow for flexibility where appropriate (e.g., adaptive management).
- Actions will be considered using an interdisciplinary approach.
- The planning team commits to work cooperatively with federal agencies; tribal, state, and local governments; and affected and interested public parties. A process of collaborative public involvement and participation will continue throughout this planning effort.
- The RMPA/EIS will recognize valid existing rights related to the use of the public land.

- The process will involve government-to-government coordination and consultation with Native American tribal governments, as required, and provide strategies for protection of cultural resources on public land.
- The BLM will consider the compatibility of its decisions with existing plans and policies of adjacent federal, tribal, state, and local lands (while recognizing that decisions must be made in conformance with relevant laws, regulations, and BLM management policies).

1.4.6 Relevant Statutes, Limitations, and Guidelines

The BLM’s planning process (as described in 43 CFR 1600) is authorized and mandated through the laws described below.

The **Federal Land Policy and Management Act of 1976** (FLPMA) states that the BLM “shall, with public involvement...develop, maintain, and when appropriate, revise land use plans” (43 USC 35§1712[a]). In addition to federal direction for planning, FLPMA declares the policy of the U.S. concerning the management of federally owned land administered by the BLM. Key to this management policy is the direction that the BLM “shall manage the public lands under principles of multiple use and sustained yield, in accordance with the [developed] land use plans” (43 USC 35§732[a]). The commitment to multiple use does not mean that all land will be open for all uses. Some uses may be excluded on some land to protect specific resource values or uses, as directed by FLPMA (43 USC 35§1712[c][3]). Any such exclusion; however, will be based on laws or regulations or be determined through a planning process subject to public involvement. In writing and revising land use plans, FLPMA also directs the BLM to coordinate land use activities with the planning and management of other federal departments and agencies, state, and local governments, and American Indian tribes. This coordination; however, is limited “to the extent [the planning and management of other organizations remains] consistent with the laws governing the administration of the public lands” (43 USC 35§1712[c][9]).

In the **National Environmental Policy Act of 1969** (NEPA), Congress directs “all agencies of the Federal Government...[to]...utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment” (42 USC 55§4332[2A]). Because the development of a new and/or revised or amended RMP could cause impacts on the environment, NEPA regulations require the analysis and disclosure of potential environmental impacts in the form of an EIS. This EIS examines a range of alternatives to resolve the issues in question. Alternatives are designed to represent complete, but alternative, means of satisfying the identified purpose of and need for the EIS and of resolving the issues. The WRFO RMPA/EIS is being prepared using the best available information.

The **Mineral Leasing Act of 1920**, as amended, gives the BLM the responsibility for oil and gas leasing on about 564 million acres of BLM, national forest, and other federal lands, as well as state and private surface lands where mineral rights have been retained by the federal government. As such, the BLM reviews and approves permits and licenses from companies to explore, develop, and produce oil and gas resources on both federal and Native American lands. The BLM is also responsible for inspection and enforcement of oil, gas, and other development operations to ensure that lessees and operators comply with the lease requirements and BLM’s regulations.

In addition to these acts, management of public land and resources is authorized and directed through several resource-specific and resource use-specific laws, regulations, and executive orders. The direction from these laws, regulations, and executive orders is refined and made department-

and bureau-specific through agency documents such as Instruction Memoranda (IM), Information Bulletins (IB), manuals, and handbooks.

1.4.7 Other Related Plans

The BLM planning policies require that the BLM review approved or adopted resource plans of other federal, state, local, and tribal governments and, where practicable, be consistent with those plans. Table 1-2 identifies plans that are relevant to the management of land and resources that apply to this RMPA/EIS process. Many of the Comprehensive Plans listed below include relevant land use, economic, and socioeconomic elements and guidance.

Table 1-2. Plans Relevant to the WRFO Oil and Gas Development Draft RMPA/EIS

Local Plans	
<ul style="list-style-type: none"> Town of Meeker Comprehensive Plan (Updated September 2005) 	<ul style="list-style-type: none"> Town of Rangely Comprehensive Plan 2004 to 2024: “Rangely: Building on Diverse Opportunities from Scenic Settings and Resource Wealth” (July 20, 2004)
<ul style="list-style-type: none"> Glenwood Springs Comprehensive Plan (March 2011) 	<ul style="list-style-type: none"> City of Rifle Comprehensive Plan (November 2009)
County Plans	
<ul style="list-style-type: none"> Rio Blanco County Master Plan (adopted January 13, 2011) 	<ul style="list-style-type: none"> Garfield County Comprehensive Plan 2030 Update (adopted November 10, 2010)
<ul style="list-style-type: none"> Moffat County/City of Craig Master Plan (dated April 2003; adopted June 3, 2003) 	<ul style="list-style-type: none"> Moffat County Land Use Plan: Chapter One (adopted September 2001)
State Plans	
<ul style="list-style-type: none"> Colorado Division of Wildlife (CDOW) Strategic Plan 2010-2020 (September 10, 2009) 	<ul style="list-style-type: none"> Colorado State Land Board guidance documents:
<ul style="list-style-type: none"> Colorado’s Comprehensive Wildlife Conservation Strategy and Wildlife Action Plans, Coordinated by CDOW (November 2, 2006) 	<ul style="list-style-type: none"> Oil and Gas and Solid Mineral Leasing, Policy No. 2003-01 (Amended Date: April 18, 2003); Management of Mineral Activities on Stewardship Trust Properties, Policy No. 2002-03 (December 20, 2002); Guidelines - Colorado Oil and Gas Leases (August 17, 1999)
Federal Plans	
<ul style="list-style-type: none"> Approved Resource Management Plan Amendments/Record of Decision for Oil Shale and Tar Sands Resources to Address Land Use Allocations in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement (November 2008) 	<ul style="list-style-type: none"> Approved Resource Management Plan Amendments/Record of Decision for Designation of Energy Corridors on Bureau of Land Management-Administered Lands in the 11 Western States (January 2009)
<ul style="list-style-type: none"> Record of Decision – Implementation of a Wind Energy Development Program and Associated Land Use Plan Amendments (December 2005) 	<ul style="list-style-type: none"> Supplement to the Draft Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States (October 2011)
<ul style="list-style-type: none"> White River National Forest Land and Resource Management Plan, Final Environmental Impact Statement and Record of Decision (2002 Revision) 	<ul style="list-style-type: none"> White River National Forest Air Resource Management Plan (January 2009)
<ul style="list-style-type: none"> Record of Decision White River National Forest Travel Management Plan (March 2011) 	<ul style="list-style-type: none"> Little Snake Record of Decision and Approved Resource Management Plan (October 2011)
<ul style="list-style-type: none"> Little Snake Field Office, Draft Additional Air Quality Assessment to Support the Draft Resource Management Plan Revision/Environmental Impact Statement (September 2008) 	<ul style="list-style-type: none"> Glenwood Springs Resource Area Oil and Gas Leasing and Development Record of Decision and Resource Management Plan Amendment (March 1999)
<ul style="list-style-type: none"> Grand Junction Resource Area Resource Management Plan and Record of Decision (January 1987) 	<ul style="list-style-type: none"> BLM Vernal Field Office Record of Decision and Approved Resource Management Plan (October 2008)
<ul style="list-style-type: none"> Draft Resource Management Plan and Draft Environmental Impact Statement for the Colorado River Valley Field Office, Colorado (September 2011) 	<ul style="list-style-type: none"> Dinosaur National Monument General Management Plan (1986)

1.4.8 Master Leasing Plans

The Master Leasing Plan (MLP) concept, introduced in Washington Office Leasing Reform Instruction Memorandum (IM) 2010-117 (BLM 2010), promotes a proactive approach to planning for oil and gas development. Generally, the BLM uses RMPs to make oil and gas planning decisions, such as areas closed to leasing, open to leasing, or open to leasing with major or moderate constraints (lease stipulations) based on known resource values. However, additional planning, analysis, and decision-making may be necessary prior to oil and gas leasing because of changing circumstances, updated policies, and new information. Because the WRFO began this planning process in 2006 and had prepared the majority of the document prior to the adoption of WO-IM-2010-117, Master Leasing Plans are discussed in Appendix I. Appendix I provides an overview of the two external MLP proposals and discusses how, since the focus of this amendment is oil and gas development, the alternatives analyzed capture, in detail, the requirements of an MLP for the entire resource area.

1.5 Alternatives Considered but Not Carried Forward for Detailed Analysis

The following alternatives were considered as possible management approaches but were eliminated from detailed analysis because the BLM determined that they either did not meet the purpose and need for the RMPA/EIS (see Section 1.2), or were not practical or feasible alternatives due to technical, economic, and legal and policy considerations. These alternatives include: (1) Current Management using 1997 RFD Scenario, (2) Phased Development in the Piceance Basin, (3) Single Well Pads, (4) Reduced or Limited Pace of Oil and Gas Drilling, (5) Limit on Number of Well Pads or Wells, and (6) Limiting Cumulative Total Surface Disturbance.

The specific rationale for dismissing each from further consideration is described below.

1.5.1 Current Management using 1997 Reasonable Foreseeable Development Scenario

The BLM considered an alternative that reflected the continuation of current management under the projections for oil and gas activity presented in the 1997 RFD Scenario. However, the BLM determined that such an alternative would not meet the purpose and need for the RMPA/EIS, which is, in part, to address the substantial changing oil and gas resource conditions in the WRFO Planning Area and the need to manage the impacts of the projected increase in oil and gas activity in relation to other resources within the WRFO Planning Area (see Section 2.1.1.3 for a description of the BLM's 2007 RFD Scenario [BLM 2007]). For the purpose of this analysis, the newly developed 2007 RFD Scenario will replace the 1997 RFD Scenario for all alternatives including the No Action Alternative.

1.5.2 Phased Development in the Piceance Basin

The BLM considered applying the concepts for “phased development” of oil and gas resources that were considered in the Roan Plateau RMPA (BLM 2007c) as an alternative to addressing the duration, intensity, and extent of development activity in the Piceance Basin. Traditionally, “phased development” refers to prescribing the sequence of drilling operations by geographic area to allow for the development of certain areas while resting or temporarily restricting development of other areas. Subsequent development occurs as areas developed earlier are completed and reclaimed. The phased development approach evaluated in the Roan Plateau RMPA (BLM 2007c) included: (1) restricting drilling operations to prescribed geographical development areas at any one time and

prohibiting shifting operations to the next development area until reclamation is complete; and (2) limiting total surface disturbance at any one time to a specific acreage. After further consideration, the BLM determined that phased development was not feasible for the WRFO Oil and Gas Draft RMPA/EIS, since the majority of acres within the Planning Area are already leased; it would not meet the purpose and need (see Section 1.2).

Restricting drilling operations to prescribed development areas based on geography would have limited effectiveness in managing the impacts of the projected increase in oil and gas activity in relation to management objectives for other resources, as resource conditions vary across the WRFO Planning Area. Further, restricting drilling operations to prescribed geographical development areas could cause delays in the production of energy resources. In the WRFO Planning Area (and different from the Roan Plateau Planning Area), 80 percent of leasable acres are already leased, including 93 percent of leasable acres with high oil and gas occurrence potential. If only a limited number of wells were allowed to be drilled each year, some lessees would be prevented from developing their lease even as they were paying rental fees on the acreage they are leasing. Also, if more than one party leases an area and only a limited number of wells were allowed during a given timeframe, the BLM would have the responsibility for choosing which lessee could drill. The BLM would also have the responsibility for deciding which areas to develop first. Establishing criteria for making such decisions would be difficult because the BLM would have to prioritize some resources or resource uses over others, which could conflict with the BLM's mandate of multiple use.

Phased development would also cause delays in production of energy resources, and would not respond to supply and demand economics. As a result of phased development, gas production might occur slowly enough so that the pipeline companies might find it not economically feasible to build the infrastructure needed to transport gas to market.

Under a phased development approach based on geographical development areas, the number and miles of roads and the amount of infrastructure could also increase if developed and sized for each phase as compared to a party's entire leaseholding. Roads, support facilities, and pipelines might also be better planned and sited as part of an area-wide development plan.

Although the BLM eliminated this phased development alternative from detailed analysis based on the rationale presented above, key elements of Alternatives B and C are a "managed development" approach (described in Chapter 2) for addressing the duration, intensity, and extent of development activity in the Piceance Basin. Although still aimed at limiting spatial disturbance, the managed development approach differs from the traditional "phased development" approach in that limitation of the spatial extent of surface disturbance is achieved by managing the extent of impacts to sensitive wildlife habitats rather than limiting total surface disturbance to a specific geographic area, or specific acreage regardless of habitat or terrain. Further, reclamation of a particular wildlife habitat, rather than a geographic area, is used as the criterion for removing acres of habitat from the disturbance threshold computation.

1.5.3 Single Well Pads

The BLM considered an alternative that would evaluate the impacts of the use of (only) single well pads, as was considered in the 1997 White River RMP (BLM 1997a). However, information obtained from oil and gas operators in updating the 2007 RFD Scenario (BLM 2007) indicated most oil and gas companies plan to implement technology for multi-well drilling from each well pad, as this has become economically feasible. Federal regulations (43 CFR §3160) require lessees to attain maximum economic recovery of the leased resource. The regulations also requires the operator to

exercise due care and diligence to assure that leasehold operations do not result in undue damage to surface or subsurface resources or surface improvements. Therefore, an alternative based on single well pads was dropped from detailed analysis as it would not meet the economic criteria of the federal regulations or reduce impacts.

1.5.4 Reduced or Limited Pace of Oil and Gas Drilling

The BLM considered an alternative to set or control the pace of oil and gas development but determined, through a review of the federal regulations, that the holders of federal oil and gas leases have the right to develop those leases; consequently, it was dropped from detailed analysis as it does not meet the purpose and need in terms of responding to the changing conditions (i.e., the projected increase in oil and gas activity) within the WRFO Planning Area. 43 CFR §3160.1-2 states “the lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, and dispose of all the leased resource in a leasehold.” The 43 CFR §3160 regulations also require lessees to attain maximum economic recovery of the leased resource, and for leaseholders to conduct their operations in a manner that prevents undue and unnecessary impact. It is not possible at a planning level to determine whether a lease would actually be developed, and if it is what well spacing or level of development would be necessary to achieve the requisite maximum economic recovery of the oil and gas resource. Well spacing can vary from development area to development area. The pace of development would vary significantly between these scenarios. Pace of development, including reduced or limited rates of development, would be more appropriately projected and evaluated in project- or field-specific NEPA analysis.

1.5.5 Limit on Number of Well Pads or Wells

As stated in the previous section, federal regulations state that the holders of federal oil and gas leases have the right to develop those leases; consequently, this alternative was dropped from detailed analysis due to policy considerations. 43 CFR §3160.1-2 states “the lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, and dispose of all the leased resource in a leasehold.” The 43 CFR §3160 regulations also require lessees to attain maximum economic recovery of the leased resource. The number of well pads or wells would be more appropriately projected and evaluated in project- or field-specific NEPA analysis. Instead of limiting the number of wells or well pads, Alternatives B and C apply thresholds that could ultimately limit the number of wells or well pads that are developed.

1.5.6 Limiting Cumulative Total Surface Disturbance

The BLM considered an alternative that would limit the total acreage of surface disturbance associated with oil and gas activities at any one time. However, such an alternative would be difficult to apply equitably and monitor across the WRFO Planning Area, and would have limited effectiveness in achieving management objectives, as resource conditions vary throughout the planning area. The BLM would have to decide which areas to develop at any given time. In an area with multiple lessees, the BLM would also have to choose which lessee could drill at any given time, which could conflict with granted lease rights. This alternative is not consistent with the BLM’s oil and gas leasing policies and regulations and could restrict the economic development of leases. Instead of limiting cumulative total surface disturbance, Alternatives B and C apply thresholds which may ultimately limit the number of acres that are disturbed.

1.5.7 Greater Sage-Grouse National Technical Team Report Alternative

The BLM published a Notice of Intent in the Federal Register on December 9, 2011, initiating a range-wide planning process that would analyze the National Technical Team Report Alternative in detail. The BLM Northwest Colorado District Office is in the process of completing an Environmental Impact Statement and possible Plan Amendment that will consider and analyze this alternative in detail, and will address BLM-managed lands in the White River Field Office planning area. The Oil and Gas Development RMP Amendment does address management of greater sage-grouse but only in the context of decisions related to oil and gas development. The National Technical Team (NTT) Report presented guidance related to the fluid minerals program but also to wide range of programs including travel and transportation management, recreation, lands and realty, range, wild horses, solid minerals, locatable minerals, salable minerals, vegetation treatments, and fire management. Addressing changes to other programs besides fluid minerals and the creation of special designations is outside the scope of this planning effort. Further, the BLM is not making allocation decisions related to areas open or closed to oil and gas leasing during this planning effort. Therefore, the Greater Sage Grouse NTT Report Alternative has been considered but eliminated from detailed analysis for this planning process.